

DATASHEET

FUJITSU D2616 SAS/SATA RAID CONTROLLER

D2616 SAS 6Gb/s 512 MB based on LSI MegaRAID® for internal storage devices

The RAID concept (Redundant Array of Independent Disks) refers to several independent hard disks which when switched together form a large logical drive. Redundancy information is calculated from several data blocks (except for RAID 0) and saved distributed to the individual hard disks. Your operating system no longer accesses the individual hard disks, but the array.

The actual objective of the RAID concept is to increase availability and prevent downtimes in the event of a hard disk failure. However, the theoretical security of the RAID concept is only as good as the RAID controller used.

Benefit from the Fujitsu RAID controllers in which technology, experience and practical implementation all ensure the safety that your company needs in the event of an emergency.



D2616 SAS/SATA RAID CONTROLLER

The 8 port Fujitsu D2616 SAS/SATA RAID controller sets new standards in the fields of speed and data security for internal server memories. With a data transfer of up to 6Gb/s per port the PRIMEGY Modular RAID Controller family is extended to include the latest technology.

The RAID stack is based on the LSI MegaRAID® and offers high data throughput, a comprehensive error tolerance function and user-friendly management options. Management of the controller is integrated seamlessly into the FTS management concept. All controller functions are supported by the FTS ServerView RAID Manager. 6Gb/s SAS is designed for backward compatibility with 3Gb/s SAS as well as with 6Gb/s and 3Gb/s SATA hard drives. Regardless of the drive speed, 6Gb/s MegaRAID® controllers will deliver significant performance improvements in both read and write applications, as compared with their 3Gb/s predecessors. Other new features of the 6Gb/s SAS 2.0 controllers include greater signal integrity using Decision Feedback Equalization, support for more sophisticated SAS topologies using Expander Self-Discovery / Self-Configuration, and additional safeguards to enhance data protection.

Due to the support of 64-bit addressing, a robust set of RAID features and demanding error tolerance functions this controller provides high RAID performance and data availability. Powerful online management service programs (FTS's ServerView RAID Manager), which are simple to operate and quick to install, provide the administrator with unparalleled flexibility and access to the arrays.

The RAID controller supports all of the important RAID levels including RAID 6 and 60. RAID 6 tolerates up to two simultaneous drive failures and thus also the option of managing non-recoverable media errors during rebuilds. This is especially advantageous if a large number of high-capacity hard disk drives are used for each RAID array.

Consistency testing and Patrol Read, sophisticated background service processes, which locate and repair faulty media blocks, provide unmatched data protection functions for business-critical applications.

The optional battery backup module ensures the integrity of the data stored in the cache on the RAID controller, because it provides a back-up power supply during a complete or short-term failure of the power supply. Battery backup units (BBU) provide a low-priced alternative to an uninterruptible power supply (UPS).

MAIN FEATURES	BENEFITS
<ul style="list-style-type: none"> ■ 6Gb/s SAS ports PCI Express® 2.0 x8 ■ LSI SAS2108 6Gb/s RAID-on-Chip ■ 512MB 800MHz DDRII cache memory ■ Optional Battery Backup Unit (BBU) ■ User Management Options 	<ul style="list-style-type: none"> ■ Connect up to 8 HDDs (in future also up to 20 HDDs) ■ RAID levels 0, 1, 5 and 6 for more data security ■ RAID spans 10, 50 and 60 for more data security ■ For data security in case of power failure ■ Seamless merging of the RAID management into system management

TECHNICAL DETAILS

TECHNICAL DETAILS

Controller type	Integrated RAID 5/6 Ctrl
Controller Silicon	RoC (RAID on Chip) LSI SAS2108
Interface technology	SAS
Data transfer rate up to	6 Gb
RAID controller cache size	512 MB Cache
BBU Support	optional BBU
Number of ports	8 ports int.
Number of Connectors	2
Connector internal	SSF-8087
Bus type	PCIe 2.0
Bus width	x8
Key RAID Data Protection Feature	<p>RAID levels 0, 1, 5, and 6</p> <p>RAID spans 10, 50 and 60</p> <p>Online Capacity Expansion (OCE)</p> <p>Online RAID Level Migration (RLM)</p> <p>Auto resume after loss of system power during array rebuild or reconstruction</p> <p>Configurable stripe size up to 1MB</p> <p>Fast initialization for quick array setup</p> <p>Check Consistency for background data integrity - Make Data Consistent (MDC)</p> <p>Patrol read for media scanning and repairing</p> <p>64 logical drive support</p> <p>Up to 64TB LUN support DDF-compliant</p> <p>Configuration on Disk (COD)</p> <p>S.M.A.R.T support</p> <p>Global and dedicated Hot Spare with Revertible Hot Spare support</p> <ul style="list-style-type: none"> - Automatic rebuild - Enclosure affinity <p>Enclosure management</p> <ul style="list-style-type: none"> - SES (inband) - SGPIO (sideband)
RAID Management	<p>ServerView RAID Manager</p> <p>MegaCLI (command-line interface)</p> <p>WebBIOS</p>
Supported operating systems	<p>Microsoft® Windows Server® 2003 R2</p> <p>Microsoft® Windows Server® 2008</p> <p>Microsoft® Windows Server® 2008 R2</p> <p>Red Hat Enterprise Linux</p> <p>Novell SUSE Linux Enterprise Server</p> <p>VMware vSphere 4.0</p>
COMPLIANCE	
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

FUJITSU PLATFORM SOLUTIONS

In addition to Fujitsu D2616 SAS/SATA RAID controller, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing Products

www.fujitsu.com/global/services/computing/

Software

www.fujitsu.com/software/

MORE INFORMATION

Learn more about Fujitsu D2616 SAS/SATA RAID controller, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
<http://ts.fujitsu.com/Primergy>

FUJITSU GREEN POLICY INNOVATION

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at <http://www.fujitsu.com/global/about/environment/>



COPYRIGHTS

All rights reserved, including intellectual property rights. Changes to technical data reserved. Delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner. For further information see http://ts.fujitsu.com/terms_of_use.html
Copyright © Fujitsu Technology Solutions

DISCLAIMER

Technical data are subject to modification and delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner

CONTACT

FUJITSU Technology Solutions
Mies-van-der-Rohe-Straße 8
80807 München
Germany
Website: www.ts.fujitsu.com
2010-03-04 CE-EN